This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Original) A method for identifying compounds that modulate human orexin-2 receptor activity, comprising:

a) combining a putative modulator of human orexin-2 receptor activity with human orexin-2 receptors contained within membranes of cells non-recombinantly possessing the human orexin-2 receptor; and

b) measuring an effect of the modulator on activity of the human orexin-2 receptor.

2. (Original) The method of claim 1, wherein the human orexin-2 receptors are contained within membranes of intact cells.

3. (Original) The method of claim 1, wherein the human orexin-2 receptors are contained within membrane structures selected from the group consisting of isolated membrane fragments, unilamellar vesicles and multilamellar vesicles.

4. (Original) The method of claim 1, wherein the cells possessing the human orexin-2 receptor are PFSK-1 cells.

5. (Original) The method of claim 1, wherein the effect measured in step (b) is binding of the putative modulator to the orexin-2 receptors.

6. (Original) The method of claim 1, wherein the effect measured in step (b) is competition of the putative modulator with a known ligand of the human orexin-2 receptor for binding to the receptors.

7. (Original) The method of claim 2, wherein the effect measured in step (b) is modulation of a human orexin-2 receptor intracellular second messenger.

8. (Original) The method of claim 7, wherein the intracellular second messenger is selected from a group consisting of cAMP, Ca^{++}, and a reporter gene product.

9. (Original) The method of claim 8, wherein the cells are transfected with a Gα-protein DNA construct.

10. (Original) The method of claim 8, wherein the intracellular second messenger is Ca^{++}, detected with a fluorescent Ca^{++} indicator.

11. (Original) The method of claim 1, adapted to distinguish the putative modulator as an agonist, antagonist or inverse agonist of the orexin-2 receptor.

Claims 12-21. Cancelled.